REMARKS

This paper is filed in response to the non-final official action of October 7, 2008, wherein (a) claims 1-20 were pending; (b) claims 1-3, 6, and 8-19 were rejected as allegedly being obvious over Chen US 2002/0147828 A1 ("Chen") in view of Oyama US 7,106,718 B2 ("Oyama"); (c) claims 4, 5, and 20 were rejected as allegedly being obvious over Chen and Oyama in view of 'QBone Signaling Design Team ("QBone"); and (d) claim 7 was rejected as allegedly being obvious over Chen and Oyama in view of Suomi US 2005/0007981 A1 ("Suomi").

This response is timely filed.

By the foregoing, claims 1, 2, 4-8, 10-15, and 20 have been amended to clarify the language of the claims and to more particularly claim the invention. Claim 3, 9, and 17-19 have been canceled, without prejudice. Claims 21-27 have been added. No new matter is added.

Claims 1, 2, 4-8, 10-16, 20, and 21-27 are pending in the application. The applicants respectfully request reconsideration and allowance of the application in view of the foregoing amendments and below-provided remarks.

Claim Rejections under 35 U.S.C. §103(a)

All claim rejections are based on Chen in combination with Oyama (claims 1, 2, 6, and 8-16), Chen in combination with Oyama and 'QBone (claims 4, 5, and 20), or Chen in combination with Oyama and Suomi (claim 7).

For reasons detailed below, the rejections of claims 1, 2, 4-7, 8-16, and 20 are traversed. Reconsideration is respectfully requested.

Claim 1 as amended now recites a method for providing reliable transmission Quality of Service (QoS) in a communication network, wherein the method comprises a local bearer network resource manager sending an establish connection request to the peer bearer network resource manager to create a QoS

connection between the local bearer network resource manager and the peer bearer network resource manager. The QoS connection is established after the local bearer network resource manager receives an establish connection response from the peer bearer network resource manager.

The examiner concedes that Chen does not teach creating a QoS connection between bearer network resource managers. Instead, the examiner contends that Oyama teaches creating the QoS connection between the bearer network resource managers. This contention is respectively traversed.

Chen discloses a method for providing service level agreement (SLA) based end to end QoS between service domain A and service domain B (See FIGs. 3 and 5, Para. [0045] and Para. [0050]). As shown in FIG. 2 and described in Para. [0027] and Para. [0044] of Chen, each service domain A, B has its own SLA_A, SLA_B. For example, service domain A sends a request-response negotiation to service domain B with its SLA_A. Service domain B either accepts, changes, or rejects the request-response negotiation and then returns its SLA_B. Once the requested request-response negotiation is accepted, the SLA-based end to end QoS is established.

Contrary to A and B of claim 1, Chen does not teach (1) a local bearer network resource manager, (2) a peer bearer network resource manager, (3) an establish connection request, and (4) a QoS connection. According to Chen, the service domain A is a service provider of user A and the service domain B is a service provider of user B (See Para. [0027]). Since the service domain of Chen is not a bearer network resource manager whatsoever, Chen cannot be said to teach a local bearer network resource manager and a peer bearer network resource manager as recited in claim 1. Also, Chen's SLA-based end to end QoS defines agreed services and associated qualities exchanged between service domain A and service domain B (See Para. [0032]). In the instant application, QoS connection is a link between two bearer network resource managers and in that link, a service is

transmitted from the local bearer network resource manager to the peer bearer network resource manager (page 1, line 24). Chen's SLA-based end to end QoS is completely different from the QoS connection in claim 1. Therefore, Chen cannot be said to teach the QoS connection as recited in claim 1. As generally discussed earlier, Chen describes that the request-response negotiation is established between service domain A and service domain B to exchange SLA_A, SLA_B. In A and B of claim 1, the establish connection request-response established between the local bearer network resource manager and the peer bearer network resource is to create the QoS connection. Therefore, Chen request-response negotiation is different from the establish connection request-response in claim 1. Therefore, Chen cannot be said to teach the establish connection request-response as recited in claim 1.

Oyama at best discloses a mobile station (MS) that sends a radio resource control (RRC) connection request to an access point to establish a RRC connection between the MS and the access point. This RRC connection contains only radio channel and does not cover a QoS whatsoever (See FIG. 15, Col. 13, 53-56). Once the RRC connection is established, the MS then sends a bearer setup message to the access point to setup a signaling bearer connection between network nodes. The bearer setup message contains a signaling QoS (See FIG. 2, Col. 10, 16-34).

Contrary Oyama to A of claim 1, it is apparent that the procedure of establishing the RRC connection and the signaling bearer connection between network nodes in Oyama are completely different from establishing a QoS connection between a local bearer network resource manager and a peer bearer network resource manager in A and B of claim 1. According to Oyama, the RRC connection contains radio channel only (Col. 13, 54-64) and the signaling bearer connection is data transmission (Col. 3, ll. 61-64). In the instant application, QoS connection is a link between two bearer network resource managers for transmitting service through the link(page 1, line 24). The RRC connection and the signaling bearer connection of Oyama do not contain any service transmission and therefore

are completely different from the QoS connection of claim 1. Thus, Oyama cannot be said to teach the QoS connection of claim 1. Also, Oyama's signaling of QoS is used for transporting data between network nodes. The network nodes in Oyama include a serving GPRS support node (SGSN), a radio network controller (RNC), a gateway GPRS support node (GGSN), for instance (See Col. 5, ll. 26-33). In the instant application, the establish connection request-response is used to create the QoS connection between the bearer network resource managers, for example, see A and B of claim 1. Signaling QoS and network nodes in Oyama are completely different from the establish connection request-response and the bearer network resource managers in A and B of claim 1. Therefore Oyama cannot be said to teach the establish connection request-response and the bearer network resource managers in A and B of claim 1.

Claim 1 as amended further recites the local bearer network resource manager transmits QoS information to the peer bear network resource manager through the QoS connection, wherein the QoS information is provided to connection nodes connected to the local bearer network resource manager and the peer bearer network resource manager respectively for providing corresponding resource.

As the applicants previously discussed, none of the references teach the QoS connection, the establish connection request-response, and the bearer network resource managers. In Chen, SLA_A and SLA_B are exchanged among the service domains to establish a SLA-based end to end QoS. According to Chen, SLA_A and SLA_B are service level agreements that provide some kind of identities of the service domains. Therefore SLA_A and SLA_B do not contain any QoS information whatsoever. In Oyama, none of the RRC connection, the signaling bearer connection, and the signaling QoS contain any service transmission (e.g. QoS information) whatsoever is transmitted between two entities. As generally discussed earlier, the RRC connection in Oyama contains radio channel only and the signaling bearer connection in Oyama is data transmission. Further, the signaling QoS Oyama is used for transporting data between network nodes. Contrary Chen and

Oyama to C of claim 1, the QoS information for service transmission is contained in the QoS connection. Therefore, Chen and Oyama cannot be said to teach transmitting the QoS information through the QoS connection from the local bearer network resource manager to the peer bearer network resource manager.

Accordingly, the applicants respectfully assert claim 1 is patentable over Chen and Oyama.

In view thereof, reconsideration and withdrawal of the rejections of claims 1, 2, 4-7, 8-16, and 20 are solicited.

New independent claim 21 is an apparatus claim and recites a communication network and the network includes a first and second bearer network resource managers. The first bearer network resource manager sends an establish connection request to the second bearer network resource manager for requesting to create a QoS connection between the first bearer network resource manager and the second bearer network resource manager. Further, the first bearer network resource manager receives an establish connection response from the second bearer network resource manager so as to create the QoS connection and transmits QoS information through the QoS connection to the second bearer network resource manage. The first bearer network resource manager and the second bearer network resource manager in communication with the first bearer network resource manager control and manage resources according to the QoS information.

As the applicants explained earlier, none of the references teach the QoS connection, the establish connection request-response, and the bearer network resource managers. In Chen, SLA_A and SLA_B are exchanged among the service domains to establish a SLA-based end to end QoS. According to Chen, SLA_A and SLA_B are service level agreements that provide some kind of identities of the service domains. Therefore SLA_A and SLA_B do not contain any QoS information whatsoever. Service domains A and B are provided in Chen system to establish an exchange using its SLA_A and SLA_B. In the instant application, the first bearer

network resource manager and the second bearer network resource manager control and manage resources according to the QoS information.

In Oyama, none of the RRC connection, the signaling bearer connection, and the signaling QoS contain any service transmission (e.g. QoS information) whatsoever. As generally discussed earlier, the RRC connection in Oyama contains radio channel only; and the signaling bearer connection in Oyama is data transmission. Further, the signaling QoS Oyama is used for transporting data between network nodes. The Oyama system does not control and manage resources according to the RRC connection, signaling bearer connection, or the signaling QoS.

Contrary Chen and Oyama to claim 21, the QoS information for service transmission is contained in the QoS connection and the bearer network resource managers control and manage resources according to the QoS information. Therefore, Chen and Oyama cannot be said to teach the subject matter recited in claim 21.

Accordingly, the applicants respectfully assert claim 21 is condition for allowance, as are claims 22-24 depending from claim 21.

New independent claim 25 is a method claim including language similar to that recited in apparatus claim 21.

Thus, for similar reasons to those outlined above, the applicants respectfully assert claim 25 is condition for allowance, as are claims 26 and 27.

Conclusion

A prompt indication of allowability of all claims 1, 2, 4-8, 10-16, 20, and 21-27 is earnestly solicited.

Should the examiner wish to discuss the foregoing, or any matter of form in an effort to advance this application toward allowance, he is urged to telephone the undersigned at the indicated number.

Dated: January 7, 2009

Respectfully submitted,

By _____

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